

PATENT ABSTRACTS OF JAPAN

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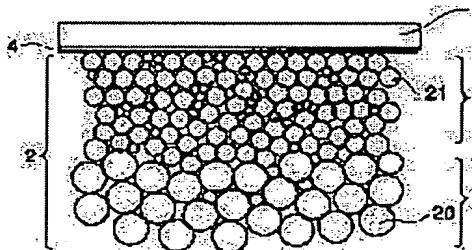
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(54) PHOTOELECTRIC CONVERSION DEVICE

(57) Abstract:

PROBLEM TO BE SOLVED: To resolve the drawback that the photoelectric conversion efficiency is degraded due to the movement of the charge carriers being adversely affected when employing fine particles of an n-type semiconductor oxide as the electrodes in a photoelectric conversion device such as a dye sensitized solar cell type.



SOLUTION: The photoelectric conversion device such as a dye sensitized solar cell comprises a transparent conductive layer 4 deposited on a transparent substrate 1, an electrode 2 formed of fine particles of an n-type semiconductor oxide deposited over the transparent conductive layer, a charge transfer layer 3 in junction with the electrode, and another substrate 6 with an opposite electrode 5 placed against the charge transfer layer 3. The device is characterized in the fact that the average particle size of the n-type

semiconductor oxide is greater in the region adjacent to the charge transfer layer than in the region adjacent to the transparent conductive layer.

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